This listing of claims will replace all prior versions of claims in the application.

Claim 1. (currently amended) A photoresist comprising a photoactive component and a polymer that comprises: i) a heteroalicyclic group that does not contain a carbonyl ring member ~~and is not an oxonorbornyl~~ and is fused to the polymer backbone and that contains one or more oxygen or sulfur ring atoms; ii) a carbon alicyclic group fused to the polymer backbone; and iii) ~~a polymerized acrylate that comprises~~ a photoacid-labile moiety.

Claim 2. (original) The photoresist of claim 1 wherein the heteroalicyclic group has an oxygen ring member.

Claim 3. (original) The photoresist of claim 1 wherein the heteroalicyclic group has a sulfur ring member.

Claim 4. (previously presented) The photoresist of claim 1 wherein the carbon alicyclic group is a polymerized norbornene group.

Claim 5. (previously presented) The photoresist of claim 1 wherein the heteroalicyclic group has a non-hydrogen ring substituent.

Claims 6-22. (cancelled)

Claim 23. (previously presented) The photoresist of claim 1 wherein the polymer is a tetrapolymer or pentapolymer.

Claim 24. (previously presented) The photoresist of claim 1 wherein the polymer is completely free of aromatic groups.

Claims 25-34. (cancelled)

Claim 35. (previously presented) A method of forming a positive photoresist relief image, comprising:

(a) applying a coating layer of a photoresist of claim 1 on a substrate; and

(b) exposing and developing the photoresist image to yield a relief image.

Claims 36-40. (cancelled)

Claim 41. (previously presented) An article of manufacture comprising a microelectronic wafer substrate or a flat panel display substrate having coated thereon a layer of a photoresist composition of claim 1.

Claims 42-45. (cancelled)

Claim 46. (previously presented) The photoresist of claim 1 wherein the photoacid-labile moiety is a substituent of the heteroalicyclic group or carbon alicyclic group.

Claim 47. (previously presented) The photoresist of claim 1 wherein the photoacid-labile moiety is a polymer unit distinct from the heteroalicyclic group and carbon alicyclic group.

Claim 48. (previously presented) The photoresist of claim 1 wherein the polymer further comprises lactone or anhydride units.

Claim 49. (previously presented) The photoresist of claim 1 wherein the polymer further comprises polymerized maleic anhydride groups.

Claim 50. (previously presented) The photoresist of claim 1 wherein the heteroalicyclic group fused to the polymer backbone does not contain an unsaturated oxygen.

Claim 51. (previously presented) The photoresist of claim 1 wherein the heteroalicyclic group fused to the polymer backbone does not contain an unsaturated sulfur.

Claims 52-60. (cancelled)

Claim 61. (previously presented) The method of claim 35 wherein the photoresist layer is exposed with radiation having a wavelength of less than about 200 nm.

Claim 62. (previously presented) The method of claim 35 wherein the photoresist layer is exposed with radiation having a wavelength of about 193 nm.

Claim 63. (cancelled)

Claim 64. (previously presented) The photoresist composition of claim 1 wherein the polymer is at least substantially free of aromatic groups.

Claim 65. (previously presented) The photoresist composition of claim 1 wherein the heteroalicyclic group is not an anhydride or lactone.

Claim 66. (previously presented) The photoresist composition of claim 1 wherein the heteroalicyclic group contains a single ring oxygen atom.

Claims 67-69. (cancelled)